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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,614	01/08/2002	Jose Luis Bonilla Griz	MANZ-0018-1	7764
22506	7590	12/19/2003	EXAMINER	
JAGTIANI + GUTTAG 10363-A DEMOCRACY LANE FAIRFAX, VA 22030			WILKINS III, HARRY D	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/038,614	BONILLA GRIZ, JOSE LUIS	
	Examiner	Art Unit	
	Harry D Wilkins, III	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-54 is/are pending in the application.
- 4a) Of the above claim(s) 31-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I in Paper No. 10-27-2003 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 12, 14-16, 18-21, 24 and 27-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Imbertecche (FR 2286891).

Imbertecche anticipates the invention as claimed. Imbertecche teaches (see abstract and figures 1-4) a plant for the production of hydrogen including at least one pair of electrodes and means (pressurized storage and piping) for receiving hydrogen gas formed during an electrolysis reaction, wherein the means communicate with a turbine and wherein the electrodes are operated in water at a depth sufficient for the pressure of hydrogen to operate the turbine [i.e.-when it is brought to the surface]. Imbertecche teaches (see lines 15-16 of page 4, orally translated by USPTO) attaching an external DC power source 46. Also, Imbertecche teaches (see figure 4) that the power lines running to the electrodes can be attached to external power source 46.

Regarding claim 12, Imbertecche teaches (see lines 15-16 of page 4, orally translated by USPTO) attaching an external DC power source 46.

Regarding claim 14, Imbertech teaches (see figure 3) that the means for collecting the gas included tubing 10 or 11.

Regarding claim 15, Imbertech teaches (see figure 3) that the means for collecting the gas included duct 14 or 15.

Regarding claim 16, Imbertech teaches (see abstract) storing the hydrogen in "pressurized storage receivers".

Regarding claims 18 and 19, Imbertech teaches (see abstract and figure 4) that the top end of the hydrogen receiving means are attached to the turbine and the turbine is connected to an electrical generator.

Regarding claim 20 and 21, Imbertech teaches (see figure 4) that the electric power generator can be connected back to the electrode leads and that the apparatus includes means for connecting and disconnecting the electrode leads.

Regarding claim 24, Imbertech teaches (see figure 4) that the electric power source to the electrode leads can be connected and disconnected.

Regarding claim 27, Imbertech teaches (see figure 2) including 4 pairs of electrodes.

Regarding claim 28, Imbertech teaches (see figure 2) including a first pair of electrodes attached to an outer power source and a second pair of electrodes attached to an electric power generator.

Regarding claim 29, Imbertech teaches (see figure 4) that the apparatus includes means for connecting and disconnecting the electrodes from the outer power supply.

Regarding claim 30, Imberteché teaches (see abstract) that the apparatus includes means for collecting and storing the hydrogen gas.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imberteché (FR 2286891).

Regarding claim 17, Imberteché does not disclose that the means for maintaining the pressure included a valve. However, Imberteché does teach (see abstract) that initially the gases are collected and then discharged. One of ordinary skill in the art would have expected that the means for collecting at first, and then discharging later, would have included a valve because a valve is a very convenient means for shutting off and opening the flow through a pipe.

Regarding claims 25 and 26, Imberteché does not disclose adding means for reducing the amount of power provided by the outer power supply that includes a timer to control cycles of connecting and disconnecting. However, it would have been within the expected skill of a routineer in the art to have adapted the apparatus of Imberteché to operate on an intermittent basis, by adding means for interrupting the power supply at predetermined certain intervals.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Imberteché (FR 2286891) in view of Carpenter (US 4,199,025).

Imberteché teaches a DC power supply. Thus, Imberteché fails to teach an AC power supply. However, it would have been within the expected skill of a routineer in the art to have operated the electrolysis reaction using an AC power source. Electrolysis of water using AC power was known in the art as evidenced by Carpenter (see col. 13, lines 26-54).

7. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imberteché (FR 2286891) in view of Merenda (US 3,614,268).

Regarding claim 22, Imberteché is silent as to the type of generator that is used. However, it would have been within the expected skill of a routineer in the art to have used a conventional AC generator, such as an alternator, because the alternator allows for maximum efficiency given varying pressure in the turbine, as can be seen in Merenda (see col. 2, lines 1-7).

Regarding claim 23, Merenda teaches (see abstract) including rectifiers for converting the AC current produced by the alternator into a DC current.

Conclusion

A full translation of the Imberteché document has been requested by the Examiner and it will be forwarded on to Applicant's representative as soon as it is received.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 703-305-9927. The examiner can normally be reached on M-Th 10:00am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Harry D Wilkins, III
Examiner
Art Unit 1742

hdw

ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700